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Volume XIII

JULY 1961

Number 3

## Some Economic Aspects of Food Stamp Programs

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*La meilleur de tous les tarifs serait celui qui ferait payer à ceux qui passent sur une voie de communication un peage proportionnel à l'utilité qu'ils retirent du passage.*<sup>1</sup>—Jules Dupuit, 1849.

FROM AN ECONOMIC STANDPOINT, the essential thing about food stamp programs is not that people can buy food with stamps instead of with money. The essential feature of these programs is that low-income people can buy food at reduced prices. The food stamp (or coupon) is simply a convenient mechanism for enabling these families to pay lower prices, and for enabling the Government to make up the difference by a subsidy from the Federal treasury.

Thus, any form of food stamp program (including the program operated in the United States from 1939 to 1943, and also including the pilot programs recently started in eight experimental areas of this country), is essentially a classified price arrangement. In principle, it is something like classified milk prices, where part of the milk is sold as fluid milk at a class I price and the surplus is sold for cream and manufactured dairy products at lower class II and class III prices. Economists often call such arrangements "price discrimination" or "multiple pricing."

The quotation at the beginning of this article, from the French engineer-economist Jules Dupuit, refers to the system of tolls on bridges and highways, as well as to freight rates on railroads. Dupuit advocated a system of classified tolls or charges in which each commodity and each group of persons would pay rates proportionate to the "utility they received." This argument is similar

to the argument that freight rates, for example, should be based on the "value of service," or to the one that medical bills should be graduated according to "ability to pay."

Multiple prices may be profitable or unprofitable to the producer. They may benefit or harm the consuming public. A few economists have discussed both aspects of this problem. One of the best discussions since Dupuit is that of Robinson.<sup>2</sup> The main principle is illustrated in figure 1. This diagram does not represent the food stamp program exactly. Rather, it shows how a food stamp program would work if it were a simple 2-price arrangement.

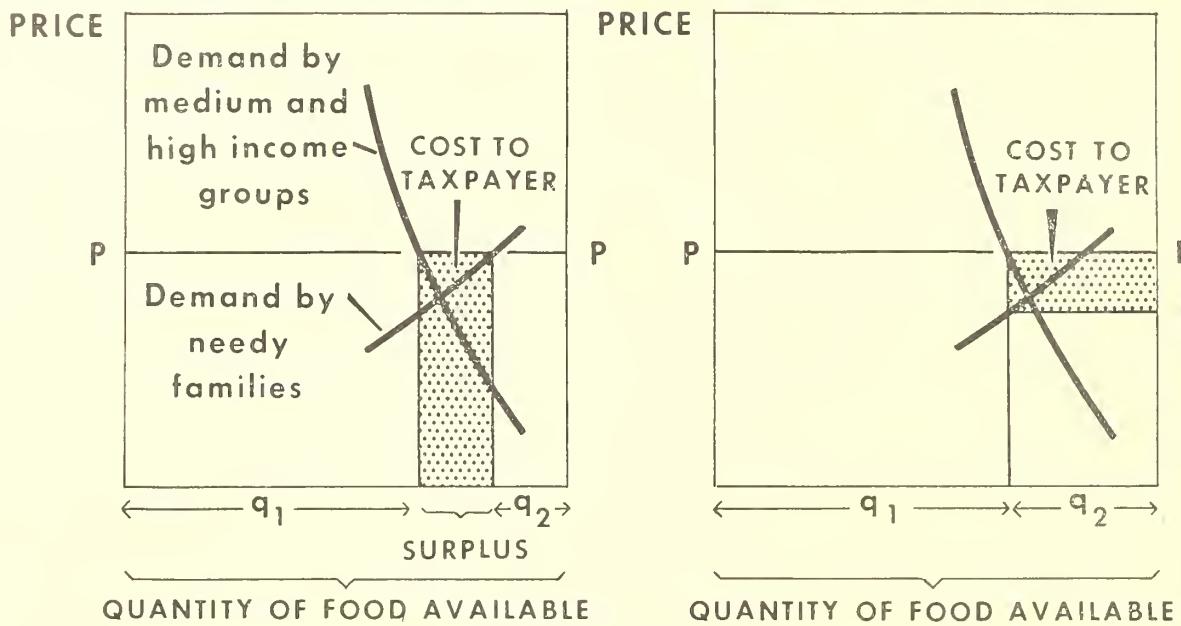
Both sides of the diagram assume that a given amount of food is available. Two demand curves are assumed to be known: The demand by medium- and high-income families, and the demand by needy families. In analyzing 2-price arrangements, it is convenient to show the first of these demand curves in the ordinary way, but to reverse the demand curve for needy families—plotting it from right to left instead of from left to right.

If the market were entirely free and competitive, the price would be determined by the intersection of the two demand curves. Assume that this price is low and that the public generally agrees that some program is needed to raise farm

<sup>1</sup> The best system of pricing would be one that requires each user of a bridge, highway, or railroad to pay a charge proportionate to the benefits he gets.

<sup>2</sup> Robinson, Joan, THE ECONOMICS OF IMPERFECT COMPETITION, chapters 15 and 16. Macmillan. London. 1938.

# SOME ECONOMIC EFFECTS OF - PRICE-SUPPORT and of FOOD STAMP PROGRAMS PROGRAMS



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 148-61 (5) ECONOMIC RESEARCH SERVICE

Figure 1.

prices and income. One way of doing this is that shown on the left grid of the diagram. This represents a simple price-support program under which prices are increased to the level marked  $P$ . At this price, medium- and high-income groups will buy the quantity marked  $q_1$  and needy families will buy the quantity marked  $q_2$ . These two quantities together are less than the amount of food available, leaving the surplus that must be bought by the Government. The cost of this program to the taxpayer is the shaded area marked in the diagram.

The right side of the diagram illustrates what would happen under a simple form of food stamp operation, in which low-income families were allowed to buy as much as they pleased at a discount price. Assume the same level of price support  $P$ . But assume that the discount  $D = P - R$  is so ad-

justed that needy families will buy and consume the surplus. The cost to the taxpayer is then the shaded area in the diagram to the right.

The purpose of these two diagrams is not to demonstrate which type of program would cost the taxpayer more. This depends upon the slopes of the two demand curves. We do not yet have an accurate statistical measurement of the demand curve for food by needy families. But in any case some one must pay for any agricultural program that raises farm income. The type of program may determine how these costs are divided between the taxpayer and the consumer of food.

An analysis along the lines shown graphically in the diagram to the right of figure 1 shows that if a producer can divide his market into two parts, one of which is more elastic (or less inelastic)

than the other, he would generally find it profitable to charge a higher price in the less elastic market and a lower price in the more elastic market. The mathematics and geometry presented by Robinson are in terms of marginal returns from the two markets. Assuming that the two markets are independent of one another, and that marginal returns from market 1 are less than from market 2, it will always be profitable to shift part of the supply from market 1 to market 2.

Economists are accustomed to thinking in terms of elasticities of demand rather than in terms of marginal returns. These concepts are closely related. In fact, if  $MR$  represents marginal returns, if  $P$  represents price, and if  $e$  represents elasticity  $MR=P(1+1/e)$ . While economists do not have as much information as they would like about the demand for food by needy families, they have reason to believe that this demand is less inelastic than is the demand for food by medium- and high-income groups.

This means that the marginal returns from food sold in the low-income market are probably greater than the marginal returns from food sold in the medium- and high-income market. For this reason, a good, workable food stamp program would be not only a welfare program to help needy families, it would also be one of the most effective programs—dollar for dollar—for maintaining farm income.

This does not mean that a domestic food stamp program alone would be big enough to handle all surplus problems in agriculture and give farmers a satisfactory income. But it does mean that a dollar spent for a good food stamp program might return as much or more to the farmer than a dollar spent for most other farm programs.

### The Present Pilot Food Stamp Programs

Beginning about the first of June, pilot food stamp operations were undertaken in eight areas of the country: Franklin County, Ill.; Floyd County, Ky.; Detroit, Mich.; the Virginia-Hibbing-Nashwauk area of Minnesota; Silver Bow County, Mont.; San Miguel County, N. Mex.; Fayette County, Pa.; and McDowell County, W. Va. These are the "distressed areas" where there are substantial amounts of unemployment and many families receive low incomes.

In these areas, State and local welfare agencies have certified needy families for participation in the stamp program whose incomes are so low that they are unable to afford the cost of an adequate diet. Families with no income get food stamps free of cost, but these families constitute a small proportion of the total number participating. Most families have some income. Those families choosing to participate are charged varying amounts for food coupons, with the charge graduated according to their incomes. The program is entirely voluntary.

If a family chooses to participate, it must buy enough coupons to provide an improved diet. The family uses these coupons to buy food in local retail stores. The participation of retail stores is also voluntary. If a store wants to participate, the owner must apply for permission and be approved. Participating stores receive the food coupons from needy families and cash them at face value at their local banks.

For the present, these pilot programs are limited to the eight areas mentioned. The program will be much too small to have any noticeable effect on the country as a whole. These pilot operations are intended to determine whether it would be feasible to develop a national food stamp program that might eventually raise the nutritional levels of the Nation and redirect our agricultural productive capacity into foods for which there is a greater current need. Without in any way pre-judging what these pilot operations may show, it is appropriate at the start to consider how food stamp programs may affect various groups of people, including low-income consumers, food trades, taxpayers, and farmers.

### Low-Income Consumers

The pilot stamp programs will enable needy families in the eight areas to buy more nearly adequate, balanced diets. They will not compel them to buy these diets unless needy families choose to do so, but they will give them enough food purchasing power to do so if they choose. The extent to which participating families improve their diets will depend in some degree upon the success of educational efforts to help them spend their food coupons as wisely as possible.

The direct distribution programs that we have had in the past did not pretend to enable low-

income families to get adequate diets. They were much too small for this purpose, and they were restricted to a few foods—in many instances not the foods most needed to improve the diets of low-income families.

The other main feature of the pilot food stamp program is that it gives needy families practically free choice as to the foods they buy with their coupons. The present regulations governing the pilot operations define "eligible foods" to mean "any food or food product for human consumption, except coffee, tea, cocoa (as such), alcoholic beverages, tobacco, and those products which are clearly identifiable from the package as being imported from foreign sources."

At first, many officials in the U.S. Department of Agriculture thought it might be necessary to limit the use of coupons to certain listed foods, or to post in each store a list of ineligible foods. From an administrative standpoint, this would have been a complicated procedure.

The former food stamp program, which operated from 1939 through 1943, used stamps of two different colors. The orange-colored stamps (which were bought by the participating families) could be used to buy any food. The blue stamps (which were paid for by the Government) could be used only to buy foods designated as in surplus.

In principle, the idea of two colors of stamps has a great deal of appeal. But actually, the blue stamps were never very effective in concentrating the additional purchases on surplus items. This was true because the families substituted the "blue stamp" purchases for their normal purchases of these items, and essentially their increased purchasing power resulted in increased total purchases of those items for which they had a greater need.

This might have been different if the "surplus list" had been limited to a very few commodities for which the families had a greater need. And it might have been different if the "surplus list" had been limited to a very few commodities for which the families had real urgent need.

What commodities will benefit under one color of stamp remains to be demonstrated. It is one of the principal things being tested in the pilot operation. From an administrative standpoint, it is easier to operate a program with coupons of one color than with those of two or more colors. Moreover, from the standpoint of the needy families, it is desirable to have as much freedom of

choice as possible. Professional welfare experts are generally agreed that "relief in kind" is less desirable than a relief payment in money. The use of food coupons is restricted to foods, but obviously it gives families a greater choice than direct distribution under which they take whatever foods are handed out.

Despite the benefits we have enumerated, some needy families may prefer direct distribution to a food stamp program. Under the direct distribution program, eligible families get a certain quantity of free food without regard to the normal food expenditures for their income group. They can, therefore, divert varying amounts of their previous food expenditures to other nonfood needs. If they participate in a stamp program, they must pay an amount roughly equal to the normal food expenditures of their income group. The Department will carry on an intensive research program during the test period in the pilot areas. Part of this research will deal with consumer attitudes and preferences.

## Food Trades

From the standpoint of the food trades, the main feature of the stamp program is that it is operated by and through private industry. The Government does not buy surplus foods and distribute them to needy families in competition with commercial food distribution; it simply enables needy families to buy foods in their local retail stores. The private food trades do all the buying, processing, and distributing. The program will provide a net increase in food sales.

On the other hand, any food stamp program involves some inconvenience and cost to the food trade. Perhaps the managers of stores have become accustomed to such inconvenience as trading stamps and various kinds of coupons under special advertising deals. The food stamp program is voluntary, but present indications are that all retailers will be glad to take part.

## Taxpayers

As previously indicated, someone pays for any program that raises farm incomes. But there may be some misunderstanding as to the relative costs of stamp programs and direct distribution.

A fully adequate national food stamp program would probably be fairly expensive. Certainly,

it would cost substantially more than the inadequate direct distribution program we have had in recent years. In a sense, the reason direct distribution programs have generally been felt to have cost practically nothing is because we have simply given away food surpluses that were already owned by the Commodity Credit Corporation.

Recently, the direct distribution program has been substantially increased by adding meat and a number of other vegetable protein foods. If the direct distribution program were expanded until it provided adequate diets, it might well cost more than a food stamp program. This is because it is doubtful that Government distribution can be accomplished for a relatively small number of persons as effectively or as cheaply as our highly developed commercial food-distribution system, which serves the total population.

One of the main purposes of research planned as a part of the pilot program is to make an accurate and reliable appraisal of cost in relation to dollar amounts, as well as kinds, of increased food consumption.

### Farmers

Some critics of food stamp programs emphasize that they will not help the main surplus commod-

ities such as wheat, feed grains, and cotton. This is correct. The benefits of food stamp programs will probably be concentrated largely on meats, poultry and eggs, dairy products, and fruits and vegetables. Indirectly, they can be of substantial assistance to corn and other feed grains. In other words, the farm products that these programs will help most are the nonbasic perishable commodities. These are the commodities that Section 32 (an Act to increase the domestic consumption of non-price support, perishable commodities) was designed to assist. The pilot stamp program is being financed from Section 32 funds.

Although food stamp programs will probably never do much to help wheat and cotton, they could, if extended to all needy families throughout the Nation, help to meet the general problem of overcapacity in agriculture. This is not to say that any domestic food program alone is likely to be big enough to prevent surplus problems in the future. We will need many different kinds of programs, including export programs and some means of adjusting production.

But if the pilot operations show us how to develop a workable and effective food stamp program, such a program can be of substantial benefit to farmers in the future.





